

Please add the following new claims:

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-- 21. (New) The plasma processing apparatus as claimed in claim 1, further comprising:  
a gas-injecting part connected to said process chamber so as to inject a discharge gas into said process chamber; and  
a second gas-evacuating arrangement connected to said gas-injecting part so as to evacuate the discharge gas from said gas-injecting part.

B2 22. (New) The plasma processing apparatus as claimed in claim 21, wherein said gas-injecting part has an annular shape and is incorporated into a sidewall of said process chamber above or below said gas-introducing part, said gas-injecting part has a plurality of circumferentially arranged nozzles through which the discharge gas is introduced into said process chamber.

23. (New) The plasma processing apparatus as claimed in claim 22, wherein said gas-injecting part comprises:  
at least one inlet port from which the discharge gas is supplied;  
an annular gas passage connected to said inlet port so that the discharge gas supplied from the inlet port is supplied to said plurality of nozzles by flowing through said annular gas passage; and  
an outlet port provided to said annular gas passage so that said second gas-evacuating arrangement is connected thereto.

24. (New) The plasma processing apparatus as claimed in claim 21, wherein said discharge gas includes a mixture of gas produced by adding  $N_2$  and  $H_2$  to at least one of neon, xenon, argon, helium, radon and krypton.

25. (New) The plasma processing apparatus as claimed in claim 21, wherein said reactant gas includes a gas selected from the group consisting of  $NH_3$ ,  $SiH_4$ ,  $Cl_2$ ,  $HCl$ ,  $HF$ ,  $BF_3$ ,  $SiF_3$ ,  $GeH_3$ ,  $AsH_3$ ,  $PH_3$ ,  $C_2H_2$ ,  $C_3H_8$ ,  $SF_6$ ,  $CCl_2F_2$ ,  $CF_4$ ,  $H_2S$ ,  $CCl_4$ ,  $BCl_3$ ,  $PCl_3$ ,  $SiCl_4$ . --

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